

**REMARKS**

Claims 17, 20, 21, and 23-36 are pending. No amendment is made in this Reply.

**I. Typographical Errors**

In this Office Action, the Examiner summarized Applicants' amendments to the claims submitted in the Response filed March 20, 2003, designated as Amendment E by the Office. Office Action at page 2. In this summary, the Examiner's reiteration of Applicants' amended claim 17 contains numerous typographical errors. For instance, the weight of at least one anionic surfactant is 4% to 50% not 5% to 40%. *Id.* This error continues to appear throughout the Office Action at pages 3, 4, 7, and 8. Further, the at least one amine-comprising silicone with an average molecular mass range should be from 11,000 to 25,000 not 1,000 to 25,000. *Id.* Applicants request that these errors be noted on the record as typographical errors by the Office and thus, not adversely impacting Applicants' amended claim 17 submitted in the Response filed March 20, 2003.

Also in the Examiner's summary, claim 18 was identified as a pending claim. Claim 18, however, was canceled in the Response dated March 20, 2003. Thus, the status of claim 18 is canceled, not pending.

**II. Rejection under 35 U.S.C. § 103(a)**

The Office maintains the rejection of claims 17-21 and 23-36 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,529,586 to DeMarco et al.

(“DeMarco”) in view of WO 94/06403 to Reich et al. (“Reich”) but with a new interpretation. Office Action at page 2. Applicants respectfully disagree and traverse the rejection for the following reasons.

In the previous Office Action (dated November 20, 2002), the Office argued that DeMarco failed to teach the recited modified guar gums, the amounts of surfactants, and the cyclopolymers, but that Reich taught the same cationic polymer of Applicants’ claim 31, and thus, it would have been obvious to use the copolymer of Reich, as a cationic polymer, in the hair conditioning composition of DeMarco. Office Action dated November 21, 2002 at pages 3-4. In the present Office Action, the Office still relies on the same references but applies a different rationale for their combination. Office Action dated June 24, 2003 at age 3.

In the present Office Action, the Office contends that DeMarco fails to teach, among other things, 4% to 50% anionic surfactant. Office Action at page 3.<sup>1</sup> As such, the Office contends that Reich teaches 4% to 50% anionic surfactant and it would have been obvious to add the anionic surfactant from Reich to the conditioning composition of DeMarco. *Id.* at 4.<sup>2</sup> Applicants disagree.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the

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<sup>1</sup> The recitation of 5% to 40% at page 3 is, as noted above, a typographical error on the part of the Office.

<sup>2</sup> The recitation of 5% to 40% at page 4 is, as noted above, a typographical error on the part of the Office.

reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. M.P.E.P. § 2143 (8th ed. Rev. 2, 2004).

As discussed below, the Office, in the present case, fails to provide a suggestion or motivation for the combination and also fails to show a reasonable expectation of success for the combination.

**A. No Suggestion or Motivation to Combine References**

In the Office Action, the Office ignores the express teachings of the references and instead, claims a motivation to combine based on *similar ingredients*. Office Action at 3, 4. Similarity alone is not the test for obviousness, however. See M.P.E.P. § 2144.08. To the contrary, Applicants submit that the cited references teach away from the present invention and render the prior art unsatisfactory for its intended purpose. See M.P.E.P. § 2145.

It is improper to combine references where the references teach away from their combination. *Id.* (citing *In re Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983)). In this case, the Office asserts that the motivation for the combination is based on similar ingredients. More specifically, the Office argues that because Reich teaches a mid-to-high charge density cationic polymer successfully used in combination with anionic surfactants in shampoo, the addition of 4% to 50%<sup>3</sup> anionic surfactant of

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<sup>3</sup> The recitation of 5% to 40% at page 4 is, as noted above, a typographical error on the part of the Office.

Reich to the conditioning composition of DeMarco would have been obvious. Office Action at page 4. This rationale fails because it contradicts Reich's specification.

In particular, Reich's specification teaches that "[t]he properties of *hair conditioning agents* and the other ingredients in typical shampoo formulations tend to be mutually antagonistic, rendering the simultaneous washing and conditioning of the hair difficult to achieve." Reich at page 1 (emphasis added). Reich's premise is that the prior art formulations for shampoos and conditioners could not be successfully combined into a single "two-in-one" formulation. With Reich's earliest priority date being 1992, DeMarco was clearly prior art with a date of issuance of 1985. As such, DeMarco's conditioning formulation could be considered as one of the prior art conditioning formulations to which Reich was referring. Thus, DeMarco's conditioning formulation is part of the problem Reich is trying to solve. These facts certainly do not support a motivation to combine these two references.

The Office's motivation for the combination is also contrary to DeMarco's teachings. In DeMarco, the examples proffered show a composition applied to the hair *before or after* shampooing. Col. 7, ll. 1-5. In fact, DeMarco provides that shampooing with an anionic shampoo allows the cationic polymer to form *in situ* on the hair generating a conditioning complex that improves the durability of the conditioning effect. Col. 1, ll. 42-50. DeMarco opines that the negative sites on the hair are a result of residue left from the use of anionic surfactant-containing shampoos priming the hair for the addition of the conditioning complex. Col. 5, line 54-Col. 6, line 4. If the anionic shampoo complexes with the cationic polymer before application, then the complex is

not formed on the hair. Thus, DeMarco's teachings would teach away from combining the anionic surfactant with the conditioner prior to application on the hair, i.e., into a single formulation as presently claimed.

In addition, “[i]f a proposed modification would render the prior art invention being modified unsatisfactorily for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” M.P.E.P. § 2143.01 (citing *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 112 (Fed. Cir. 1984)). DeMarco's formulation is directed toward forming this “durable conditioning complex” between the anionic surfactant residue from a preceding shampoo or with such a surfactant from a subsequent shampoo on the hair with the remaining free positive charges of the cationic polymer of DeMarco's invention. Col. 5, line 63-Col. 6, line 4. The addition of an anionic surfactant that *can* complex with the cationic polymer without first being attached to the hair would be an unsatisfactory modification as it would not lead to the intended result, i.e., the formation of this “durable conditioning complex” on the hair.

Further, the Office selectively chooses individual components of DeMarco and Reich to arrive at the presently claimed invention. Using the Office's rationale, it would be necessary to:

1. Use the conditioning composition of DeMarco; namely, the Office identifies an amino functional silicone polymer in an aqueous emulsion such as amidomethicone, a cationic surfactant, and a cationic polymer;
2. Ignore the teaching in DeMarco that provides for the conditioning composition to be used *before* or *after* shampooing to generate a “durable conditioning complex”;

3. Look to Reich and ignore the teaching in Reich that the prior art formulations of shampoos and conditioners, i.e., DeMarco, were problematic if combined because conventional ingredients contained therein provided to be antagonistic; and
4. Pick and choose from among Reich's teachings an anionic surfactant and disregard that Reich's invention is predicated on the discovery of certain mid-to-high charge density vinyl-type copolymers that when combined do not provide the disadvantages of other "two-in-one" compositions.

This process is hardly an example of a decision to combine that would have been obvious to one of ordinary skill in the art. This is especially true considering one must ignore and/or disregard selective parts of each of the cited references. Instead, the combination proposed by the Office is an example of picking and choosing based on improper hindsight. *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1998).

Thus, the Office fails to identify any evidence of record that would motivate one of ordinary skill in the art to modify the references to obtain the present invention. Instead, the Office has improperly used Applicants' specification as a guide to re-create the present invention from the cited references. Accordingly, Applicants submit that the Office has failed to satisfy the burden of establishing a *prima facie* case of obviousness and respectfully requests that the Section 103 rejection be withdrawn.

**B. No Reasonable Expectation of Success**

The Office also fails to provide a reasonable expectation of success in the combination. The only inference of success the Office points to is that "the expected

result [of the combination of DeMarco and Reich] would be a two-in-one shampoo-conditioner formulation without any complex forming problems." Office Action at page 4. The position of the Office is based on Reich's teaching of a mid-to-high charge density cationic polymer used successfully in combination with anionic surfactants in the shampoo, without having the complexation problems between the cationic polymer and the anionic surfactant. *Id.* The Office's inference of success, however, applies to Reich's particular formulation, and not to the success of individual ingredients taken out of context.

Even assuming that anionic surfactants disclosed in Reich could be added to DeMarco's conditioning composition, no reasonable expectation of success for the combination has been shown, particularly considering Reich's teaching that prior art conditioning and shampoo agents, i.e., such as DeMarco, are mutually antagonistic, resulting in difficulties with simultaneous washing and conditioning. At best, this combination would be obvious to try. The Office, however, cannot base a determination of obviousness on what the skilled person might try or find obvious to try. Rather, the proper test requires determining what the prior art would have led the skilled person to do, which the Office has not shown. See *In re O'Farrell*, 853 F.2d 894, 7 U.S.P.Q.2d 1673 (Fed. Cir. 1988). Thus, the rejection is improper for at least these reasons and Applicants respectfully request withdrawal of this rejection.

### **III. Conclusion**

In view of the foregoing remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

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Please grant any extensions of time required to enter this response and charge  
any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

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By: Adriana L. Burgy  
Adriana L. Burgy  
Reg. No. 48,564